



power contactor, AC-3 40 A, 18.5 kW / 400 V 1 NO + 1 NC, 110 V AC 50 Hz / 120 V, 60 Hz, 3-pole, Size S2, screw terminal

|                                                                                                  |                             |
|--------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                               | SIRIUS                      |
| product designation                                                                              | Power contactor             |
| product type designation                                                                         | 3RT2                        |
| <b>General technical data</b>                                                                    |                             |
| size of contactor                                                                                | S2                          |
| product extension                                                                                |                             |
| • function module for communication                                                              | No                          |
| • auxiliary switch                                                                               | Yes                         |
| power loss [W] for rated value of the current at AC in hot operating state                       | 6.6 W                       |
| • per pole                                                                                       | 2.2 W                       |
| power loss [W] for rated value of the current without load current share typical                 | 18.5 W                      |
| surge voltage resistance                                                                         |                             |
| • of main circuit rated value                                                                    | 6 kV                        |
| • of auxiliary circuit rated value                                                               | 6 kV                        |
| maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 | 400 V                       |
| shock resistance at rectangular impulse                                                          |                             |
| • at AC                                                                                          | 11.8g / 5 ms, 7.4g / 10 ms  |
| shock resistance with sine pulse                                                                 |                             |
| • at AC                                                                                          | 18.5g / 5 ms, 11.6g / 10 ms |
| mechanical service life (switching cycles)                                                       |                             |
| • of contactor typical                                                                           | 10 000 000                  |
| • of the contactor with added electronically optimized auxiliary switch block typical            | 5 000 000                   |
| • of the contactor with added auxiliary switch block typical                                     | 10 000 000                  |
| reference code acc. to IEC 81346-2                                                               | Q                           |
| Substance Prohibitance (Date)                                                                    | 01.10.2014 00:00:00         |
| <b>Ambient conditions</b>                                                                        |                             |
| installation altitude at height above sea level maximum                                          | 2 000 m                     |
| • ambient temperature during operation                                                           | -25 ... +60 °C              |
| • ambient temperature during storage                                                             | -55 ... +80 °C              |
| <b>Main circuit</b>                                                                              |                             |
| number of poles for main current circuit                                                         | 3                           |
| number of NO contacts for main contacts                                                          | 3                           |
| • operating voltage at AC-3 rated value maximum                                                  | 690 V                       |

|                                                                                                                                                                                                                                                                                                                                                                    |                                         |
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| <b>operational current</b>                                                                                                                                                                                                                                                                                                                                         |                                         |
| <ul style="list-style-type: none"> <li>• at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>                                                                                                                                                                                                                                                      | 60 A                                    |
| <ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 40 °C rated value</li> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul>                                                                                                                              | 60 A<br>55 A                            |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>                                                                                                                                                              | 41 A<br>41 A<br>24 A                    |
| • at AC-4 at 400 V rated value                                                                                                                                                                                                                                                                                                                                     | 35 A                                    |
| • at AC-5a up to 690 V rated value                                                                                                                                                                                                                                                                                                                                 | 52.8 A                                  |
| • at AC-5b up to 400 V rated value                                                                                                                                                                                                                                                                                                                                 | 33.2 A                                  |
| <ul style="list-style-type: none"> <li>• at AC-6a <ul style="list-style-type: none"> <li>— up to 230 V for current peak value n=20 rated value</li> <li>— up to 400 V for current peak value n=20 rated value</li> <li>— up to 500 V for current peak value n=20 rated value</li> <li>— up to 690 V for current peak value n=20 rated value</li> </ul> </li> </ul> | 36.5 A<br>36.5 A<br>36.5 A<br>24 A      |
| <ul style="list-style-type: none"> <li>• at AC-6a <ul style="list-style-type: none"> <li>— up to 230 V for current peak value n=30 rated value</li> <li>— up to 400 V for current peak value n=30 rated value</li> <li>— up to 500 V for current peak value n=30 rated value</li> <li>— up to 690 V for current peak value n=30 rated value</li> </ul> </li> </ul> | 24.2 A<br>24.2 A<br>24.2 A<br>24 A      |
| minimum cross-section in main circuit at maximum AC-1 rated value                                                                                                                                                                                                                                                                                                  | 16 mm <sup>2</sup>                      |
| <b>operational current for approx. 200000 operating cycles at AC-4</b>                                                                                                                                                                                                                                                                                             |                                         |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                           | 22 A<br>18.5 A                          |
| <b>operational current</b>                                                                                                                                                                                                                                                                                                                                         |                                         |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul>                                                                             | 55 A<br>4.5 A<br>1 A<br>0.4 A<br>0.25 A |
| <ul style="list-style-type: none"> <li>• with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul>                                                                | 55 A<br>45 A<br>5 A<br>1 A<br>0.8 A     |
| <ul style="list-style-type: none"> <li>• with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul>                                                                | 55 A<br>55 A<br>45 A<br>2.9 A<br>1.4 A  |
| <b>operational current</b>                                                                                                                                                                                                                                                                                                                                         |                                         |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                     | 35 A                                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                               |
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| <ul style="list-style-type: none"> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> <li>• with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul> | 2.5 A<br>1 A<br>0.1 A<br>0.06 A<br><br>55 A<br>25 A<br>5 A<br>0.27 A<br>0.16 A<br><br>55 A<br>55 A<br>25 A<br>0.6 A<br>0.35 A                                                                                                                                                                                 |
| <b>operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• at AC-2 at 400 V rated value</li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                  | 18.5 kW<br><br>11 kW<br>18.5 kW<br>22 kW<br>22 kW                                                                                                                                                                                                                                                             |
| <b>operating power for approx. 200000 operating cycles at AC-4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11.6 kW<br>16.8 kW                                                                                                                                                                                                                                                                                            |
| <b>operating apparent power at AC-6a</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• up to 230 V for current peak value n=20 rated value</li> <li>• up to 400 V for current peak value n=20 rated value</li> <li>• up to 500 V for current peak value n=20 rated value</li> <li>• up to 690 V for current peak value n=20 rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                           | 14.5 kV·A<br>25.2 kV·A<br>31.6 kV·A<br>28.6 kV·A                                                                                                                                                                                                                                                              |
| <b>operating apparent power at AC-6a</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• up to 230 V for current peak value n=30 rated value</li> <li>• up to 400 V for current peak value n=30 rated value</li> <li>• up to 500 V for current peak value n=30 rated value</li> <li>• up to 690 V for current peak value n=30 rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                           | 9.6 kV·A<br>16.8 kV·A<br>21 kV·A<br>28.6 kV·A                                                                                                                                                                                                                                                                 |
| <b>short-time withstand current in cold operating state up to 40 °C</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• limited to 1 s switching at zero current maximum</li> <li>• limited to 5 s switching at zero current maximum</li> <li>• limited to 10 s switching at zero current maximum</li> <li>• limited to 30 s switching at zero current maximum</li> <li>• limited to 60 s switching at zero current maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                        | 843 A; Use minimum cross-section acc. to AC-1 rated value<br>596 A; Use minimum cross-section acc. to AC-1 rated value<br>400 A; Use minimum cross-section acc. to AC-1 rated value<br>241 A; Use minimum cross-section acc. to AC-1 rated value<br>196 A; Use minimum cross-section acc. to AC-1 rated value |
| <b>no-load switching frequency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5 000 1/h                                                                                                                                                                                                                                                                                                     |
| <b>operating frequency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1 200 1/h<br>750 1/h<br>1 000 1/h<br>300 1/h                                                                                                                                                                                                                                                                  |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                               |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | AC                                                                                                                                                                                                                                                                                                            |
| <b>control supply voltage at AC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 110 V<br>120 V                                                                                                                                                                                                                                                                                                |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.8 ... 1.1                                                                                                                                                                                                                                                                                                   |

|                                                                                                                                                                                             |                                                 |
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| <ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>                                                                                                                                | 0.8 ... 1.1                                     |
| <b>apparent pick-up power of magnet coil at AC</b>                                                                                                                                          |                                                 |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                | 212 V·A                                         |
| <ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>                                                                                                                                | 188 V·A                                         |
| <b>inductive power factor with closing power of the coil</b>                                                                                                                                |                                                 |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                | 0.69                                            |
| <ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>                                                                                                                                | 0.65                                            |
| <b>apparent holding power of magnet coil at AC</b>                                                                                                                                          |                                                 |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                | 18.5 V·A                                        |
| <ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>                                                                                                                                | 16.5 V·A                                        |
| <b>inductive power factor with the holding power of the coil</b>                                                                                                                            |                                                 |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                | 0.36                                            |
| <ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>                                                                                                                                | 0.39                                            |
| <b>closing delay</b>                                                                                                                                                                        |                                                 |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                   | 10 ... 80 ms                                    |
| <b>opening delay</b>                                                                                                                                                                        |                                                 |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                   | 10 ... 18 ms                                    |
| <b>arcing time</b>                                                                                                                                                                          | 10 ... 20 ms                                    |
| <b>control version of the switch operating mechanism</b>                                                                                                                                    | Standard A1 - A2                                |
| <b>Auxiliary circuit</b>                                                                                                                                                                    |                                                 |
| number of NC contacts for auxiliary contacts instantaneous contact                                                                                                                          | 1                                               |
| number of NO contacts for auxiliary contacts instantaneous contact                                                                                                                          | 1                                               |
| operational current at AC-12 maximum                                                                                                                                                        | 10 A                                            |
| <b>operational current at AC-15</b>                                                                                                                                                         |                                                 |
| <ul style="list-style-type: none"> <li>• at 230 V rated value</li> </ul>                                                                                                                    | 10 A                                            |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>                                                                                                                    | 3 A                                             |
| <ul style="list-style-type: none"> <li>• at 500 V rated value</li> </ul>                                                                                                                    | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>                                                                                                                    | 1 A                                             |
| <b>operational current at DC-12</b>                                                                                                                                                         |                                                 |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>                                                                                                                     | 10 A                                            |
| <ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>                                                                                                                     | 6 A                                             |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                                                                     | 6 A                                             |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                                                                    | 3 A                                             |
| <ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>                                                                                                                    | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                                                                    | 1 A                                             |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                    | 0.15 A                                          |
| <b>operational current at DC-13</b>                                                                                                                                                         |                                                 |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>                                                                                                                     | 10 A                                            |
| <ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>                                                                                                                     | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                                                                     | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                                                                    | 1 A                                             |
| <ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>                                                                                                                    | 0.9 A                                           |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                                                                    | 0.3 A                                           |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                    | 0.1 A                                           |
| <b>contact reliability of auxiliary contacts</b>                                                                                                                                            | 1 faulty switching per 100 million (17 V, 1 mA) |
| <b>UL/CSA ratings</b>                                                                                                                                                                       |                                                 |
| <b>full-load current (FLA) for 3-phase AC motor</b>                                                                                                                                         |                                                 |
| <ul style="list-style-type: none"> <li>• at 480 V rated value</li> </ul>                                                                                                                    | 40 A                                            |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                    | 41 A                                            |
| <b>yielded mechanical performance [hp]</b>                                                                                                                                                  |                                                 |
| <ul style="list-style-type: none"> <li>• for single-phase AC motor <ul style="list-style-type: none"> <li>— at 110/120 V rated value</li> <li>— at 230 V rated value</li> </ul> </li> </ul> | 3 hp<br>7.5 hp                                  |
| <ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> </ul> </li> </ul>  | 10 hp<br>15 hp                                  |

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| — at 460/480 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 30 hp                                                                                                                                                                          |
| — at 575/600 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 40 hp                                                                                                                                                                          |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                     | A600 / P600                                                                                                                                                                    |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                |
| <b>design of the fuse link</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>with type of coordination 1 required</li> <li>with type of assignment 2 required</li> </ul> </li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>                                                                                                                                                                                   | gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)<br>gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)<br>gG: 10 A (500 V, 1 kA) |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface                                           |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715                                                                                         |
| <ul style="list-style-type: none"> <li>side-by-side mounting</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                         | Yes                                                                                                                                                                            |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 114 mm                                                                                                                                                                         |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 55 mm                                                                                                                                                                          |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 130 mm                                                                                                                                                                         |
| <b>required spacing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>with side-by-side mounting <ul style="list-style-type: none"> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> <li>for grounded parts <ul style="list-style-type: none"> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul> </li> <li>for live parts <ul style="list-style-type: none"> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> </ul> | 10 mm<br>10 mm<br>10 mm<br>0 mm<br><br>10 mm<br>10 mm<br>6 mm<br>10 mm<br><br>10 mm<br>10 mm<br>10 mm<br>6 mm                                                                  |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                |
| <b>type of electrical connection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> </ul>                                                                                                                                                                                                                                                                                                      | screw-type terminals<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                                                                   |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>for main contacts <ul style="list-style-type: none"> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul> </li> <li>at AWG cables for main contacts</li> </ul>                                                                                                                                                                                                                                                             | 2x (1 ... 35 mm²), 1x (1 ... 50 mm²)<br>2x (1 ... 25 mm²), 1x (1 ... 35 mm²)<br>2x (18 ... 2), 1x (18 ... 1)                                                                   |
| <b>connectable conductor cross-section for main contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>finely stranded with core end processing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                      | 1 ... 35 mm²                                                                                                                                                                   |
| <b>connectable conductor cross-section for auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                           | 0.5 ... 2.5 mm²<br>0.5 ... 2.5 mm²                                                                                                                                             |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul> </li> <li>at AWG cables for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                   | 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)<br>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)<br>2x (20 ... 16), 2x (18 ... 14)                                                   |

- AWG number as coded connectable conductor cross section for main contacts 18 ... 1
- AWG number as coded connectable conductor cross section for auxiliary contacts 20 ... 14

#### Safety related data

|                                                                           |                                                  |
|---------------------------------------------------------------------------|--------------------------------------------------|
| B10 value with high demand rate acc. to SN 31920                          | 1 000 000                                        |
| <b>proportion of dangerous failures</b>                                   |                                                  |
| • with low demand rate acc. to SN 31920                                   | 40 %                                             |
| • with high demand rate acc. to SN 31920                                  | 73 %                                             |
| failure rate [FIT] with low demand rate acc. to SN 31920                  | 100 FIT                                          |
| <b>product function</b>                                                   |                                                  |
| • mirror contact acc. to IEC 60947-4-1                                    | Yes                                              |
| • positively driven operation acc. to IEC 60947-5-1                       | No                                               |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b> | 20 y                                             |
| <b>protection class IP on the front acc. to IEC 60529</b>                 | IP20                                             |
| <b>touch protection on the front acc. to IEC 60529</b>                    | finger-safe, for vertical contact from the front |
| suitability for use safety-related switching OFF                          | Yes                                              |

#### Certificates/ approvals

General Product Approval

EMC



[KC](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



ABS



BUREAU VERITAS

Marine / Shipping

other



LRS



PRS



RINA



RMRS



DNV-GL

[Confirmation](#)

other

[Confirmation](#)

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2035-1AK60>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2035-1AK60>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AK60>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

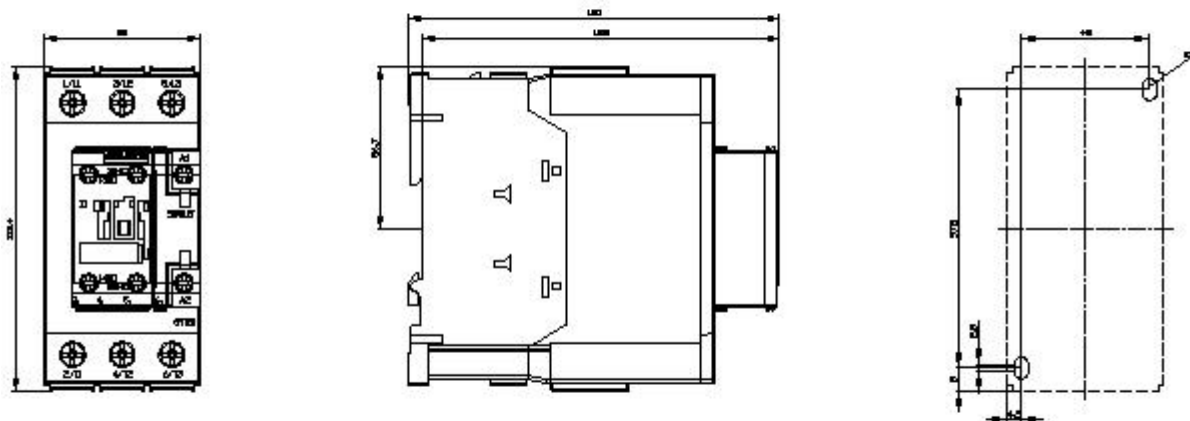
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2035-1AK60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2035-1AK60&lang=en)

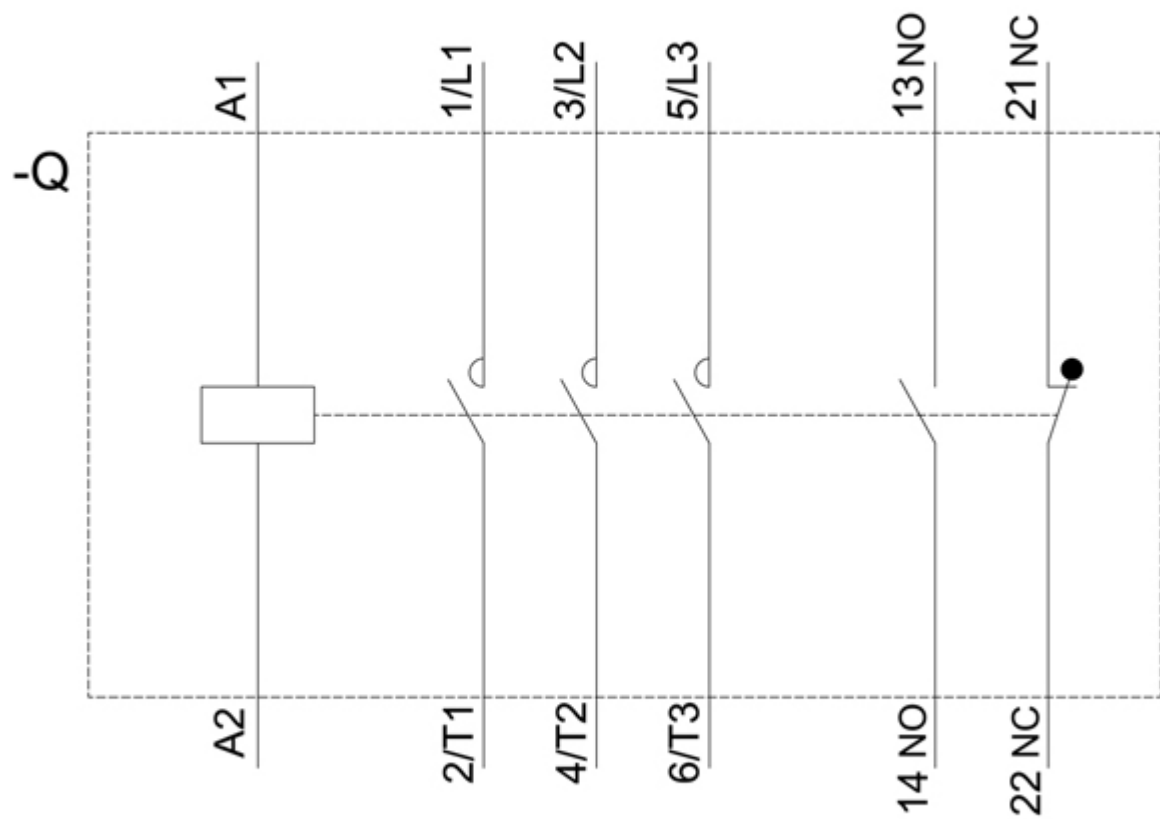
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AK60/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1AK60&objecttype=14&gridview=view1>





last modified:

12/21/2020 